

AMSAT News Service Weekly Bulletins

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AMSAT NEWS SERVICE

ANS-145

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on <http://www.amsat.org> publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

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ANS-145 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 145.01

From AMSAT HQ SILVER SPRING, MD.

May 25, 2014

To All RADIO AMATEURS

BID: \$ANS-145.01

SPROUT microsatellite launched with SSTV and digitaltalker

SPROUT is a 7.1 kg microsatellite launched on the JAXA ALOS-2 mission on May 24th from Tanegashima Space Center, Japan to a 654km sun synchronous orbit.

This satellite is a project of Nihon University and includes some interesting amateur radio payloads and experiments, including CW telemetry, an FM digipeater, digitaltalker and message box, and live and preloaded SSTV pictures!

Nihon University enjoyed previous success with SEEDS-II, aka CO-66.

SPROUT Preliminary TLE

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1 00000U 14001A 14144.15426352 .00000000 00000-0 00000-0 0 10
2 00000 097.8740 241.6133 0035980 058.6810 194.6458 14.85960816 15
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Callsign: JQ1ZJQ

Size: 214x210x220 mm

Weight: 7.1 kg

Mode: 1200bps AFSK, 9600bps GMSK

CW downlink 437.525 MHz
FM packet downlink 437.525 MHz
Digi-peater uplink 437.600 MHz
Digi-talker downlink 437.600 MHz
SSTV downlink 437.600 MHz

Telemetry software can be found at
<http://sat.aero.cst.nihon-u.ac.jp/sprout-e/2-Software-e.html>

[ANS thanks Mineo, JE9PEL, for the above information]

2014 AMSAT-NA Board of Directors Nominations Deadline Approaching

It is time to submit nominations for the upcoming open seats on the AMSAT-NA Board of Directors. A nomination requires either one Member Society or five current individual members in good standing to nominate an AMSAT-NA member for Director. Three terms expire normally this year. In addition, a forth Director will be elected for one year to fill the remainder of an unexpired term. Up to two Alternates may be elected for one year terms.

In addition to traditional submissions of written nominations, which remains unchanged and is the preferred method, nominations may be made by electronic means. These include e-mail, FAX, or electronic image of a petition. Electronic petitions should be sent to MARTHA(a)AMSAT.ORG or faxed to (301) 822-4371. Written nominations, consisting of names, calls and individual signatures should be mailed to:
AMSAT-NA
10605 Concord St,
#304 Kensington, MD 20895.

No matter what means is used, petitions MUST arrive no later than June 15th at the AMSAT-NA office. If the nomination is a traditional written nomination, no other action is required. If it is other than this, i.e. electronic, a verifying traditional written petition MUST be received at the AMSAT-NA office at the above address within 7 days following the close of nominations on June 15th.

ELECTRONIC SUBMISSIONS WITHOUT THIS SECOND, WRITTEN VERIFICATION ARE NOT VALID UNDER THE EXISTING AMSAT-NA BYLAWS.

Please note the new mailing and FAX instructions.

[ANS thanks Alan, WA4SCA, AMSAT Corporate Secretary, for the above information]

New launch date for UKube-1

The CubeSat UKube-1 will be launched from Baikonur in Kazakhstan on a Russian Soyuz-2-1b Fregat-M rocket which has Meteor-M 2 as the primary payload. The new planned launch date for UKube-1 is June 28, 2014 at 15:58:28 UT with separation +9253 s Greenwich inertial (-1859.49, -3817.49, -5581.72) km (912.1, 6027.9, -4426.4) m.s-1 (TBC).

UKube-1 carries a set of AMSAT-UK FUNcube boards (FUNcube-2) providing a 435/145 MHz linear transponder and educational telemetry beacon.

Description of UKube-1 from Clyde Space:

UKube-1 is a 3U CubeSat has been designed and manufactured by Clyde Space at their high-tech facility on the West of Scotland Science Park in Glasgow. This CubeSat is one of the most advanced of its kind, the complexity of the spacecraft highlighted by the nature of the 6 independent, advanced payloads being flown by the mission. The UKube-1 mission is the pilot for a collaborative, national CubeSat programme bringing together UK industry and academia to fly educational packages, test new technologies and carry out new space research quickly and efficiently.

Payloads on UKube-1 include: the first GPS device aimed at measuring plasmaspheric space weather; a camera that will take images of the Earth, and test the effect of radiation on space hardware, using a new generation of imaging sensor; an experiment to demonstrate the feasibility of using cosmic radiation to improve the security of communications satellites and to flight test lower cost electronic systems; an advanced mission interface computer to enable serious number crunching on tiny spacecraft; a high rate S-Band transmitter and patch antenna; an outreach payload that allows school children to interact with the spacecraft.

UKube-1 communications subsystem:

- Telemetry downlink 145.840 MHz
- FUNcube subsystem beacon 145.915 MHz
- 400 mW inverting linear transponder for SSB and CW
 - 435.080 -435.060 MHz Uplink
 - 145.930 -145.950 MHz Downlink
- 2401.0 MHz S Band Downlink
- 437.425-437.525 MHz UKSEDS myPocketQub Downlink

Other satellites on the Soyuz-2-1b Fregat-M launch are: Meteor-M 2, SkySat 2, TechDemoSat 1 (TDS 1), AISSat 2, Baumanets 2, Relek, DX 1, Venta 1, UKube 1.

[ANS thanks AMSAT-UK for the above information]

Dayton Satellite Demonstrations Videos

After a very successful set of demonstrations at the Dayton Hamvention, several videos have been posted to YouTube by some of the operators. We've gathered some of them together with links from the AMSAT website for your viewing pleasure.
<http://www.amsat.org/?p=2741>

[ANS thanks Drew, K04MA, for the above information]

2015 NASA Aeronautics Scholarships

Applications are now being accepted for 2015 NASA Aeronautics Scholarships. The program awards scholarships focused on aeronautical research and related degree programs at both the undergraduate and graduate levels. NASA's Aeronautics Research Mission Directorate sponsors the program.

Undergraduate students with at least two years of study remaining will receive up to \$15,000 per year for two years and the opportunity to receive a \$10,000 stipend by interning at a NASA research center during the summer. Graduate students receive up to \$46,000 per year for up to three years, with an opportunity to receive a \$10,000 stipend interning at a NASA research center for up to two consecutive summers. Applicants must be citizens or nationals of the United States.

Due to the One Stop Shopping Initiative maintenance, the scholarship application deadline has been extended to June 2, 2014.

Applications should be submitted through the NASA One Stop Shopping Initiative at <https://intern.nasa.gov/>. Applicants should be sure to select "scholarships" for the type of application.

[ANS thanks the NASA Education Express Message for May 15, 2014 for the above information]

NASA History Program Office Fall 2014 Internships

The NASA History Program Office is seeking undergraduate and graduate students for fall 2014 internships. The History Program Office maintains archival materials to answer research questions from NASA personnel, journalists, scholars, students at all levels and others from around the world. The division also edits and publishes several books and monographs each year. It maintains a large number of websites on NASA history.

Students of all majors are welcome to apply. While detailed prior knowledge of the aeronautics and space fields is not necessary, a keen interest and some basic familiarity with these topics are needed. Strong research, writing and editing skills are essential. Experience with social media is a plus.

Intern projects are flexible. Typical projects include handling a variety of information requests, writing posts for the NASA history twitter and Facebook pages, editing historical manuscripts, doing research and writing biographical sketches, and identifying and

captioning photos.

Fall 2014 internship applications are due June 1, 2014.

For more information, visit <http://history.nasa.gov/interncall.htm>.

If you have questions about this opportunity, please contact Bill Barry at bill.barry@nasa.gov.

[ANS thanks the NASA Education Express Message for May 15, 2014]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU40S
[ku40s at amsat dot org](mailto:ku40s@amsat.org)